STATE OF ALASKA
DEPT. OF ENVIRONMENTAL CONSERVATION

STEVE COWPER, GOVERNOR
Walter J. Hickel, Governor

(907) 452-1714

Northern Regional Office
1001 Noble Street
Suite 350
Fairbanks, Alaska 99701

January 11, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. James M. Short, Permit Director
Prudhoe Bay/Lisburne Facility Operations
ARCO Alaska Inc.
P.O. Box 100360
Anchorage, AK 99510-0360

Dear Mr. Short:

RE: LPC Frame 5 Turbine Upgrade
Air Quality Control Permit #9036-AA001

We have received your November 26, 1990, letter describing modifications to be performed on two GE Frame 5 gas turbines at the Lisburne Production Center (LPC).

The modification will change the two turbines from model GE5352B to GE5382C and up the horsepower rating to 38,000. You also indicate that emissions from the GE5382 C model are below emission limits for the GE5352B model listed in Exhibit B of Air Quality Control Permit No. 9036-AA001. The source test of the 5C model at the CGF will be used to verify the GE5382C emissions at LPC.

There is no need to rewrite the entire permit for this modification. We enclose a new Exhibit A and the first page of Exhibit B listing the source description as GE 5382C and as sources number 4 and 5. There is no change to the annual emission limit (Tone/year) in Exhibit B.

This modification may subject the turbines to the requirements of 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines. Please check with Kathy Pazera at EPA's Juneau office for applicability.

If it turns out that model 5C emits more CO or NO_x than listed in Exhibit B, ARCO will need to apply for a new permit or modification.

If you have any questions on this decision, please contact Jack Coutts at this office.

Department regulations provide that if you disagree with this decision you may request an adjudicatory hearing in accordance with 18 AAC 15.200-910. The request should be mailed to the Commissioner, Alaska Department of Environmental Conservation, P.O. Box O, Juneau, Alaska 99811-1800, by certified mail, return receipt requested. Failure to submit a request within thirty days of service of this letter shall constitute a waiver of your right to administrative review of the decision. In addition, any other person who disagrees with this decision may request an adjudicatory hearing within thirty days of service of the enclosed permit. Any hearing granted will be limited to issues related to the issuance of this permit.

Sincerely,

William D. McGee
Regional Environmental Supervisor

wm/rg
300.16.411A
enclosure: Exhibits A & B of 9036-AA001
cc: B. Fristoe/NSDO
L. Verrelli/Central Office/Juneau
K. Pazera/EPA/Juneau

Exhibit A

SOURCE INVENTORY

Source Number and ID		Source Description	Design Capacity HP or MM Btu/hr
1	LPC-T1	Ruston TB 5000 refrigeration turbine	5,000 HP
2	LPC-T2	Ruston TB 5000 refrigeration turbine	5,000 HP
3	LPC-T3	Ruston TB 5000 refrigeration turbine	5,000 HP
4	LPC-T4	GE 5382(C) gas injection turbine	38,000 HP
5	LPC-T5	GE 5382(C) gas injection turbine	38,000 HP
6	LPC-T6	Solar Mars turbine generator set	12,000 HP
7	LPC-T7	Solar Mars turbine generator set	12,000 HP
8	LPC-T8	Solar Mars turbine generator set	12,000 HP
9	LPC-T9	Solar Mars turbine generator set	12,000 HP
10	LPC-H1	BS & B TE-glycol reboiler	5.0 mm Btu/hr
11	LPC-H2	BS & B TE-glycol reboiler	5.0 mm Btu/hr
12	LPC-H3	ENTEC utility heater	30.0 mm Btu/hr
13	LPC-H4	ENTEC utility heater	30.0 mm Btu/hr
14	LPC-H5	ENTEC process heater	80.2 mm Btu/hr
15	DS1-H1	BS & B drillsite heater	25.5 mm Btu/hr
16	DS2-H2	BS & B drillsite heater	25.0 mm Btu/hr
17	DS3-H3	BS & B drillsite heater	25.0 mm Btu/hr
18	DS4-H4	BS & B drillsite heater	25.0 mm Btu/hr
19	DS5-H5	BS & B drillsite heater	25.0 mm Btu/hr
20	DS6-H6	BS & B drillsite heater	25.0 mm Btu/hr
21	LPC-EDE1	GN EMD 29F4B emergency generator	4,000 HP
22	LPC-EDE2	Caterpillar 3306T firewater pump	213 HP
23	LPC-EDE3	Caterpillar 3306T firewater pump	213 HP
24	LPC-F1	High pressure emergency flare	- - -
25	LPC-F2	Low pressure emergency flare	- - -

Exhibit B

AIR CONTAMINANT EMISSION LIMITS, STANDARDS, FUEL SPECIFICATIONS, AND OPERATING LIMITS

Exhaust conditions shall be in accordance with the information submitted by the permittee listed in Exhibit E. Permittee shall operate each source in compliance with the applicable emission standard specified in 18 AAC 50.050 and the emission limit, standard, and fuel specification listed below, whichever is most stringent. Unless otherwise noted, the emission limit applies to each source in a group of similar sources.

Part I

Air Contaminant Source Class or Numbers	Performance-based Emission Limit, Operating Limit, or Fuel Specification	Annual Emission Limit (Tons/year)
A. PARTICULATE MATTER		
Gas turbines, heaters, and diesel engines	0.05 gr/scf	89
Gas turbines, heaters, and TE-glycol reboilers	10% opacity, not to be exceeded more than three minutes per hour	
Diesel engines and flares	20% opacity, not to be exceeded more than three minutes per hour	
B. NITROGEN OXIDES		
i. Source Nos. 4-5, GE 5382(C) turbines	104 ppm(v) NO_x corrected to 15% oxygen in the exhaust	1163
ii. Source Nos. 1-3, TB 5000 turbines;	144 ppm(v) NO_x corrected to 10% oxygen in the exhaust	911
iii. Source Nos. 12-20, utility, process, and drillsite heaters	0.08 lb NO_x per mm Btu	102
iv. Source Nos. 10-11, TE-gylcol reboilers	0.16 lb NO_x per mmBtu	14

STATE OF ALASKA

STEVE COWPER, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

(907) 452-1714

Northern Regional Office
1001 Noble Street
Suite 350
Fairbanks, Alaska 99701

January 19, 1990

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. James M. Short
Permit Director
Prudhoe Bay\Lisburne Facility Operations
ARCO Alaska Inc.
P. O. Box 100360
Anchorage, AK 99510-0360

Re: Air Quality Control Permit to Operate Number 9036-AA001

Dear Mr. Short:

The Department of Environmental Conservation has reviewed your November 27, 1989, request for modification of the Air Quality Control Permit to Operate for the Lisburne Production Center at Prudhoe Bay. Based on our review of your request, the Department finds:

1. Condition No. 9 and Exhibit C: Diesel fuel sulfur content testing requirements have been revised. The Permit Condition requires you to obtain the most recent fuel sulfur test results from the supplier (Prudhoe Bay Topping Unit) in lieu of testing each delivery of diesel fuel.

   ASTM D 2622 is referred to within the ASTM D 2880-87.

2. Condition No. 15: The Condition has been changed to refer to the Facility Operating Report in Exhibit E.

3. Conditions No. 18 and 19: These Conditions have been removed from the permit. They were originally included to prevent a lengthy consistency review under the provisions of the Alaska Coastal Management Program. On January 9th, a revised list of "general concurrence" conditions was approved by the Alaska Coastal Management Program. This revised list excluded the two conditions.

4. Exhibit A: The 25.0 mm Btu/hr heaters have been listed as BS & B drillsite heaters.

5. Exhibit B, Part B, iv: The emission limits have been changed to the correct basis, "mmBtu" instead of "mmscf fuel".

6. Exhibit B, Part B, vi: We have established the volume of pilot, purge, and assist gas using the 1st and 2nd quarter 1989 Facility Operating Reports. The NO_x limit has been changed to 9 tons per year. The limit is based on the AP 42 emission factors for natural gas utility boilers, which is presently the best available estimate for NO_x emission factors from natural gas burning.

   The wording of this exhibit has been changed to reflect that emissions due to emergency flared gas would not be included in this limit.

7. Exhibit B, Part C, iii: We have revised the Exhibit to reflect a 0.25% fuel sulfur content limit for each shipment of diesel fuel.

8. Exhibit B, Part C, iv: We will retain the sulfur dioxide (fuel hydrogen sulfide) limit for the emergency flares. However, we have changed the wording of the exhibit so emergency flaring gas emissions would not be included in this emission limit.

9. Exhibit B, Part D, ii: The carbon monoxide emission limits given for Source numbers 10-20 have been changed to pounds CO/mmBtu.

10. Exhibit B, Part E: We have changed the Exhibit to exclude the emergency flares.

11. Exhibit C: The exhibit has been changed to allow testing for hydrogen sulfide concentration of fuel by methods approved by the Department.

A monthly analysis of refinery product using method ASTM D 2880-87 will be required for the supplier of the diesel fuel. The results will be used to determine compliance of each shipment with the diesel fuel sulfur content.

Therefore, as provided by 18 AAC 50.400, Air Quality Control Permit to Operate No. 9036-AA001 is granted and enclosed. This permit rescinds Air Quality Control permit to Operate No. 8936-AA010.

Please note there are 17 conditions of the permit. Violation of any one of these conditions may result in revocation or suspension of the permit in accordance with 18 AAC 50.310. The permit expires July 30, 1994 , and you must request renewal at least thirty days prior to that date for continued operation of the facility. Violation of any condition of this permit may subject you to civil or criminal penalties as provided in AS 46.03.760, AS 46.03.765, AS 46.03.780, and AS 46.03.790.

Conditions 6 through 10 require certain tests be performed to ascertain compliance with applicable standards and emission limits. The department may request source tests of any source listed in Exhibit A.

Permit conditions are stipulated pursuant to 6 AAC 50 and the Air Quality Control Regulations 18 AAC 50, and are necessary to ensure that operation of your facility is consistent with the Alaska Coastal Management Program. This permit does not relieve you from the responsibility to apply for and comply with any other permit or approval required by the Department or the U.S. Environmental Protection Agency.

Department regulations provide that if you disagree with this decision you may request an adjudicatory hearing in accordance with 18 AAC 15.200-310. The request should be mailed to the Commissioner, Alaska Department of Environmental Conservation, P.O. Box O, Juneau, Alaska 99811-1800, by certified mail, return receipt requested. Failure to submit a request within thirty days of service of this letter shall constitute a waiver of your right to administrative review of the decision. In addition, any other person who disagrees with this decision may request an adjudicatory hearing within thirty days of service of the enclosed permit. Any hearing granted will be limited to issues related to the issuance of this permit.

Sincerely,

William D. McGee
Regional Environmental Supervisor

Enclosure: Air Quality Control permit to Operate No. 9036-AA001

cc: Brad Fristoe, NSDO/ADEC
S.W. Hungerford, CO/ADEC
K. Pazera, EPA/AAO

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL PERMIT TO OPERATE

Permit No. 9036-AA001 Date of Issue: January 19, 1990
Rescinds Permit No. 8936-AA010

The Department of Environmental Conservation, under authority of AS 46.03 and 18 AAC 50.400, issues an Air Quality Control Permit to Operate to:

ARCO ALASKA, INC.
P.O. Box 100360
ANCHORAGE, AK 99510-0360

for operation of the Lisburne Production Center facility. This permit is valid only for the equipment listed in Exhibit A as described in Exhibits B through D of this permit and in the application and subsequent documentation listed in Exhibit E of this permit; where the permit is more stringent, the permit requirement applies.

The facility is located in the Prudhoe Bay Oil Field in Section 19, T 11 N, R 15 E, Umiat Meridian.

The following conditions apply:

1. Permittee shall comply with the State Ambient Air Quality Standards and Increments established in State Air Quality Control Regulation 18 AAC 50.020.

2. Permittee shall comply with the most stringent of applicable emission standards, limits, and specifications set out in State Air Quality Control Regulations 18 AAC 50.050(a)(1), (b)(1) and (c), and Exhibit B of this permit.

3. Permittee shall operate each of the three emergency diesel engines identified as Source Nos. 21-23 in Exhibit A of this permit, no more than 120 hours per year.

4. Permittee shall operate the heaters identified as Source Nos. 10-20 in Exhibit A of this permit at no more than 100 percent rated capacity.

5. Permittee shall install, maintain, and operate, in accordance with manufacturer's specifications, fuel burning equipment, process equipment, emission control devices, and testing and monitoring equipment to provide optimum control of air contaminant emissions during all operating periods.

6. Except as provided in condition 7 of this permit, permittee shall test the fuel gas, as burned at the Lisburne Production Center, monthly, to determine the concentration of hydrogen sulfide (H_2S) in the fuel gas.

7. Whenever the H_2S concentration in the fuel gas, measured as required by condition 6 of this permit, exceeds 168 parts per million, permittee shall test the fuel gas, as burned, hourly until the concentration of H_2S falls below 168 ppm for 24 consecutive hours, at which time permittee may return to the monthly testing schedule specified in condition 6.

8. Permittee shall test the fuel gas burned in the drill site heaters monthly, to determine the concentration of hydrogen sulfide in the gas.

9. Permittee shall obtain a copy of the most recent test for the sulfur content of the diesel fuel from the supplier for each shipment of fuel, using the test methods specified in Exhibit C.

10. If requested by the Department, permittee shall perform source tests of any source listed in Exhibit A, within 90 days of the request, to ascertain compliance with any applicable standard or emission limit.

11. Permittee shall conduct any test requested, as provided for by condition 10, in accordance with the applicable Performance Methods specified in 40 CFR 60, Appendix A, and report the results of the test in the format set out in Appendix III Section IV.3 of the State Air Quality Control Plan, to the Department's Northern Regional Office, 1001 Noble Street, Suite 350, Fairbanks AK 99701, within 45 days following completion of the set of tests.

12. Permittee shall notify the Department's Northern Regional Office by telephone at 452-1714 promptly, within 24 hours, of any equipment failure which increases air contaminant emissions beyond normal levels, or of any change in operating conditions which may affect air contaminant emissions. The notification must include the nature of the occurrence, the expected duration, the steps taken to minimize emissions and avoid recurrence, and a general description of the weather.

13. Permittee shall provide access to the facility at any reasonable time to the Department's representative and any other person authorized or contracted by the Department in order to conduct an inspection or tests to determine compliance with this permit and State environmental laws and regulations. The Department representative will abide by all health- and safety-related rules or procedures prescribed by the permittee, while within the permitted facility.

14. Permittee shall submit a report to the Department's Northern Regional Office, in which is a tabulation of the results of the tests required by conditions 6 through 8 of this permit, and a summary of the information required by condition 12 of this permit for each event which occurred during each calendar month, by the fifteenth day of the following month.

15. Permittee shall submit a Facility Operating Report as described in Exhibit D of this permit to the Department's Northern Regional Office semiannually, by the 30th day of January and July each year.

16. Permittee shall maintain test results, monitoring instrument recorder charts, and other applicable data in an active file for not less than one year, and have them accessible on request to the Department for not less than three years.

17. Permittee shall display a copy of this permit at the facility, and keep on file a copy of the current State Air Quality Control Regulations 18 AAC 50 at the facility.

This permit expires 30 July 1994 and may be suspended or revoked in accordance with 18 AAC 50.310.

Dated this 19th day of January 1990.

William D. McGee
Regional Supervisor

Exhibit A

SOURCE INVENTORY

Source Number and ID		Source Description	Design Capacity HP or MM Btu/hr
1	LPC-T1	Ruston TB 5000 refrigeration turbine	5,000 HP
2	LPC-T2	Ruston TB 5000 refrigeration turbine	5,000 HP
3	LPC-T3	Ruston TB 5000 refrigeration turbine	5,000 HP
4	LPC-T4	GE 5352(B) gas injection turbine	35,000 HP
5	LPC-T5	GE 5352(B) gas injection turbine	35,000 HP
6	LPC-T6	Solar Mars turbine generator set	12,000 HP
7	LPC-T7	Solar Mars turbine generator set	12,000 HP
8	LPC-T8	Solar Mars turbine generator set	12,000 HP
9	LPC-T9	Solar Mars turbine generator set	12,000 HP
10	LPC-H1	BS & B TE-glycol reboiler	5.0 mm Btu/hr
11	LPC-H2	BS & B TE-glycol reboiler	5.0 mm Btu/hr
12	LPC-H3	ENTEC utility heater	30.0 mm Btu/hr
13	LPC-H4	ENTEC utility heater	30.0 mm Btu/hr
14	LPC-H5	ENTEC process heater	80.2 mm Btu/hr
15	DS1-H1	BS & B drillsite heater	25.0 mm Btu/hr
16	DS2-H2	BS & B drillsite heater	25.0 mm Btu/hr
17	DS3-H3	BS & B drillsite heater	25.0 mm Btu/hr
18	DS4-H4	BS & B drillsite heater	25.0 mm Btu/hr
19	DS5-H5	BS & B drillsite heater	25.0 mm Btu/hr
20	DS6-H6	BS & B drillsite heater	25.0 mm Btu/hr
21	LPC-EDE1	GM EMD 20F4B emergency generator	4,000 HP
22	LPC-EDE2	Caterpillar 3306T firewater pump	213 HP
23	LPC-EDE3	Caterpillar 3306T firewater pump	213 HP
24	LPC-F1	High pressure emergency flare	---
25	LPC-F2	Low pressure emergency flare	---

Exhibit B

AIR CONTAMINANT EMISSION LIMITS, STANDARDS, FUEL SPECIFICATIONS AND OPERATING LIMITS

Exhaust conditions shall be in accordance with the information submitted by the permittee listed in Exhibit E. Permittee shall operate each source in compliance with the applicable emission standard specified in 18 AAC 50.050 and the emission limit, standard, and fuel specification listed below, whichever is most stringent. Unless otherwise noted, the emission limit applies to each source in a group of similar sources.

PART I

Air Contaminant Source Class or Numbers	Performance-based Emission Limit, Operating Limit, or Fuel Specification	Annual Emission Limit (Tons/year)
A. PARTICULATE MATTER		
Gas turbines, heaters, and diesel engines	0.05 gr/scf	89
Gas turbines, heaters, and TE-glycol reboilers	10% opacity, not to be exceeded more than three minutes per hour	
Diesel engines and flares	20% opacity, not to be exceeded more than three minutes per hour	
B. NITROGEN OXIDES		
i. Source Nos. 4-5, GE 5352(B) turbines	104 ppm(v) NO_x corrected to 15% oxygen in the exhaust;	1163
ii. Source Nos. 1-3, TB 5000 turbines; Ruston turbines	144 ppm(v) NO_x corrected to 15% oxygen in the exhaust;	911
iii. Source Nos. 12-20, utility, process and drill site heaters	0.08 lb NO_x per mmBtu;	102
iv. Source Nos. 10-11, TE-glycol reboilers	0.16 lb NO_x per mmBtu;	14

Exhibit B, continued

v. Source Nos. 21-23, diesel engines	24 pounds NO_x per 1000 HP hour;	7
vi. Source Nos. 24-25, emergency flares, exclusive of emergency flared gas	---	10
C. SULFUR DIOXIDE		
i. Source Nos. 1-9, gas-fired turbines; Source Nos. 10-14, gas-fired heaters	168 ppmv H_2S, not to be exceeded for more than three consecutive hours in the fuel gas, as burned	179
ii. Source Nos. 15-20, drill site heaters	600 ppmv H_2S, not to be exceeded for more than three consecutive hours in the fuel gas, as burned	78
iii. Source Nos. 21-23, diesel engines	0.2% S in the diesel fuel, annual average; 0.25% S in the diesel fuel, maximum per shipment	<1
iv. Source Nos. 24-25, emergency flares	168 ppmv H_2S, not to be exceeded for more than three consecutive hours in the pilot and sweep gas, exclusive of emergency flared gas	5
D. CARBON MONOXIDE		
i. Source Nos. 1-9, gas fired turbines	109 pounds CO/mmscf fuel at 100 % rated capacity, corrected to ISO conditions; not to exceed 600 pounds CO/mmscf fuel at less than rated capacity and actual operating conditions	600
ii. Source Nos. 10-20 utility, process and TE-glycol reboilers	0.018 pounds CO/mmBtu fuel	24
iii. Source Nos. 21-23 diesel engines	6.4 pounds CO/1000 HP-hr	2

Exhibit B, continued

E. VOLATILE ORGANIC COMPOUNDS

All sources, exclusive of emergency use of flares	---	11

F. EMERGENCY DIESEL ENGINES

Source Nos 21-23 diesel engines	120 hours per year, each	---

PART II

The following three pieces of equipment have been installed and operating since the last PSD permit was issued October 8, 1986. Emissions from each of these sources are limited to the quantities noted.

Source ID	Particulate Matter *(tons/yr)*	Nitrogen Oxides *(tons/yr)*	Carbon Monoxide *(tons/yr)*	Sulfur Dioxide *(tons/yr)*	Volatile Organics *(tons/yr)*	Operating Limit
21	0.6	5.8	1.7	0.2	0.2	120 hrs/year
22	<0.1	0.3	<0.1	<0.1	<0.1	120 hrs/year
23	<0.1	0.3	<0.1	<0.1	0.1	120 hrs/year
Net Increase	0.6	6.4	1.7	0.2	0.2	

NOTE: The net change in emissions shown in Part II must be considered when determining the applicability of 18 AAC 50.300(a)(6)(C) when any future modification or series of modifications to this facility is proposed which would increase emissions of a regulated air contaminant.

EXHIBIT C

PROCESS MONITORING and TESTING REQUIREMENTS

Permittee shall install continuous fuel flow monitors and perform tests or analyses of fuel as required by conditions 6 through 9 of this permit and in this exhibit. An alternate monitoring plan may be proposed if it can be shown to ensure continuous compliance with the applicable emission standard or fuel quality limit.

SOURCE (exhaust) or FUEL SUPPLY	PARAMETER AND UNIT OF MEASURE	MONITORING REQUIREMENT or TESTING PROCEDURE and FREQUENCY
Source Nos 12-14, process and utility heaters	CO and O_2	Portable CO and O_2 analyzer; once per month per heater
Lisburne Production Center fuel supply	sulfur content H_2S, ppm	Test of fuel as burned, by method proposed by permittee and approved by the Department, once each month
	fuel flow mscf/hr	Continuous monitor of total fuel consumption
Source Nos. 1-20 and heaters	fuel flow mscf/hr	Continuous monitor of fuel consumption for each turbine and for each heater
Source Nos. 15-20, drill site heaters	sulfur content H_2S	Test of fuel as burned, once each month by Department approved method
Diesel fuel	sulfur content % sulfur, by weight, each shipment of fuel	ASTM D 2880-87, monthly analysis of refinery product

Exhibit D

FACILITY OPERATING REPORT

A Facility Operating Report must be submitted to the Department of Environmental Conservation, Northern Regional Office, 1001 Noble Street, Suite 350, Fairbanks, AK 99701, semiannually, by the 30th day of January and July each year. This report must include the following information:

NAME OF FIRM
NAME OF FACILITY
PERMIT NUMBER
PERIOD OF REPORT

1. DAYS OPERATED

Group 1 - Gas-fired turbines
Source Nos. 1-9

Group 2 - Gas-fired boilers and heaters
Source Nos. 10-20

Group 3 - Emergency diesel engines
Source Nos. 21-23

Group 4 - Emergency flares
Source Nos. 24-25

Number of hours or days per quarter for each source in each group of sources; total per quarter for each group

2. FUEL CONSUMPTION

Group 1 - Turbines
Group 2 - Boilers & heaters
Group 3 - Diesel engines
Group 4 - Flares
pilot gas
purge gas
flared gas

Indicate for each source in each group, the type of fuel and the quantity burned per quarter in the appropriate units: gallons, $mmft^3$; total per quarter for each group

Exhibit D (continued)

3. FUEL QUALITY

a. Natural gas	
Production facility	Report the quarterly mean concentration of H_2S in ppm if the proportion of gas from the Lisburne field varied from month to month
Drill site heaters	Report the semiannual mean concentration
b. Diesel fuel	Sulfur content of each shipment received

4. Signature of authorized agent preceded by the statement:

> I am familiar with the information contained in this report and, to the best of my knowledge and belief, such information is true, complete, and accurate.

EXHIBIT E

PERMIT APPLICATION DOCUMENTATION

March 27, 1984	Mr. G Scott Ronzio letter to Mr. Stan Hungerford, transmitting permit application entitled, "Prevention of Significant Deterioration (PSD) Permit Application for the Lisburne Development Project Near Prudhoe Bay, Alaska, March, 1984, Final" prepared by Radian Corporation
February 26, 1985	Mr. G. Scott Ronzio letter to Mr. Leonard Verrelli and Mr. Rob Wilson with enclosure entitled, "BACT Update for Gas-Fired Turbines"
May 7, 1985	Mr. G. Scott Ronzio letter to Mr. Leonard Verrelli with attached document entitled, "Technical Note, Air Quality Analysis for the Engineering Refinement to the Lisburne Development Project, May 3, 1985"
January 30, 1986	Mr. T. R. Fink letter to Mr. Keith Kelton with comments on the Department's (Draft) Preliminary Air Quality Technical Analysis, November 6, 1985
June 16, 1986	Mr. D. A. Heatwole letter to Mr. Keith Kelton with comments on the Department's Preliminary Air Quality Technical Analysis, May 15, 1986, and draft Air Quality Control Permit to Operate
September 9, 1986	Mr. D. A. Heatwole letter to Mr. Keith Kelton commenting on proposed changes in certain permit conditions
September 24, 1986	Mr. T. R. Fink letter to Mr. Keith Kelton describing design parameters of the flare system and preliminary plans for flaring during startup of the facility
July 26, 1989	Mr. James M. Short letter to Mr. Jack Coutts describing modification of the Flare System at Lisburne Production Center
August 31, 1989	Mr. James M. Short letter to Mr. Jack Coutts requesting renewal of Air Quality Control Permit to Operate No. 8536-AA020 and identifying three minor unpermitted sources
November 27, 1989	Mr. James M. Short letter to Mr. Jack Coutts requesting amendment of Air Quality Control Permit to Operate No. 8936-AA010